

Title (en)  
DEVICE FOR PREVENTING EXPLOSIONS IN ELECTRICAL TRANSFORMERS

Title (de)  
VORRICHTUNG ZUR VERHÜTUNG VON EXPLOSION FÜR ELEKTRISCHE TRANSFORMATOREN

Title (fr)  
DISPOSITIF DE PREVENTION CONTRE L'EXPLOSION DES TRANSFORMATEURS ELECTRIQUES

Publication  
**EP 1166297 B1 20030514 (FR)**

Application  
**EP 00910985 A 20000317**

Priority  
• FR 0000666 W 20000317  
• FR 9903534 A 19990322

Abstract (en)  
[origin: US6804092B1] Device for prevention against explosion of an electrical transformer comprising an enclosure filled with combustible coolant, and a means for decompressing the enclosure of the transformer. The decompression means comprises a rupture element 1 with integrated explosion detector provided with a retention part 4 including first zones which have a reduced thickness in comparison with the rest of the retention part 4 and are capable of tearing without fragmenting when the said element 1 ruptures, and second zones which have reduced thickness in comparison with the rest of the retention part 4 and are capable of folding without tearing when the said element 1 ruptures. The said rupture element 1 is capable of breaking when the pressure inside the enclosure exceeds a predetermined ceiling. The signal from an explosion detector integrated with the rupture disc triggers a cooling system and prevents oxygen from coming into contact with the explosive gases generated by the electric arc in contact with the oil.

IPC 1-7  
**H01F 27/14**; **H01F 27/40**

IPC 8 full level  
**H01F 27/00** (2006.01); **H01F 27/14** (2006.01); **H01F 27/02** (2006.01); **H01F 27/40** (2006.01)

CPC (source: EP KR US)  
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Cited by  
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**US 6804092 B1 20041012**; AR 029342 A1 20030625; AT E240580 T1 20030515; AU 3300100 A 20001009; AU 769904 B2 20040205; BG 105907 A 20020731; BG 64202 B1 20040430; BR 0009222 A 20011226; BR 0009222 B1 20101019; CA 2367163 A1 20000928; CA 2367163 C 20101012; CN 1178233 C 20041201; CN 1346499 A 20020424; CO 5241347 A1 20030131; CZ 20013417 A3 20020213; CZ 300916 B6 20090909; DE 60002698 D1 20030618; DE 60002698 T2 20040408; DK 1166297 T3 20030915; EG 21947 A 20020430; EP 1166297 A1 20020102; EP 1166297 B1 20030514; ES 2199146 T3 20040216; FR 2791463 A1 20000929; FR 2791463 B1 20010629; GC 0000185 A 20060329; HK 1042772 A1 20020823; HK 1042772 B 20050401; HU 225863 B1 20071128; HU P0200545 A2 20020629; HU P0200545 A3 20030228; IL 145427 A0 20020630; IL 145427 A 20070308; JO 2193 B1 20031223; JP 2002540596 A 20021126; JP 5051940 B2 20121017; KR 100740617 B1 20070718; KR 20020033601 A 20020507; MX PA01009562 A 20030819; MY 120382 A 20051031; NZ 514238 A 20030530; PL 195512 B1 20070928; PL 350988 A1 20030224; PT 1166297 E 20030930; RU 2263989 C2 20051110; TW 419680 B 20010121; UA 61167 C2 20031117; WO 0057438 A1 20000928; ZA 200107559 B 20020913

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**US 93736201 A 20011217**; AR P000101242 A 20000321; AT 00910985 T 20000317; AU 3300100 A 20000317; BG 10590701 A 20010918; BR 0009222 A 20000317; CA 2367163 A 20000317; CN 00805298 A 20000317; CO 00019994 A 20000321; CZ 20013417 A 20000317; DE 60002698 T 20000317; DK 00910985 T 20000317; EG 20000351 A 20000322; EP 00910985 A 20000317; ES 00910985 T 20000317; FR 0000666 W 20000317; FR 9903534 A 19990322; GC P2000568 A 20000325; HK 02104503 A 20020618; HU P0200545 A 20000317; IL 14542700 A 20000317; IL 14542701 A 20010913; JO P20000027 A 20000323; JP 2000607234 A 20000317; KR 20017011976 A 20010920; MX PA01009562 A 20000317; MY PI20001118 A 20000321; NZ 51423800 A 20000317; PL 35098800 A 20000317; PT 00910985 T 20000317; RU 2001128305 A 20000317; TW 88108071 A 19990518; UA 2001096457 A 20000317; ZA 200107559 A 20010913